

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:
5 a semiconductor substrate on which a photoelectric converting portion is formed;
a package which comprises at least a light-shading means for shading an incoming light to said photoelectric converting portion, wherein
10 said light-shading means is formed at an area corresponding to at least the photoelectric converting portion, said area being on the side of the rear surface of the semiconductor substrate.
- 15 2. A semiconductor device according to claim 1, wherein said package comprises a wiring board with a connecting terminal formed on the rear surface.
- 20 3. A semiconductor device according to claim 1 or 2, wherein said light shading means is rough surface area.
- 25 4. A semiconductor device according to claim 1 or 2, wherein said light shading means is a multi-layer film composed of films with different refraction indices formed on the area corresponding to the photoelectric converting portion on the rear surface of said semiconductor substrate.
- 30 5. A semiconductor device according to claim 1 or 2, wherein said light shading means is a light-shading film formed on the rear surface of said semiconductor substrate.
- 35 6. A semiconductor device according to claim 1 or 2, wherein said wiring board is connected to said semiconductor substrate through a light-shading resin material.
7. A semiconductor device according to claim 1 or 2,

wherein a surface of said wiring board is rough surface.

8. A semiconductor device according to claims 1 or 2,
wherein said wiring board includes a light shading layer in
5 the interior or on the rear surface.

9. A method for manufacturing a semiconductor device
comprising the steps of:

10 a forming step for forming a plurality of semiconductor
devices on the front surface of a semiconductor substrate;
a bonding step for bonding a wiring board on the rear
surface of said semiconductor substrate;
a separating step for separating a bonding structure
obtained by bonding into semiconductor devices, and
15 a grinding step for forming rough surface on the rear
surface of the semiconductor substrate.

10. A method for manufacturing a semiconductor device
comprising the steps of:

20 a forming step for forming a plurality of semiconductor
devices on the front surface of a semiconductor substrate;
a bonding step for bonding a wiring board on the rear
surface of said semiconductor substrate through light-shading
adhesive; and a separating step for separating a bonding
25 structure obtained by bonding into semiconductor devices.